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Canada. Montreal Harbour Commission

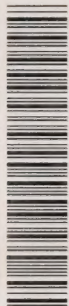
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# ANNUAL REPORT

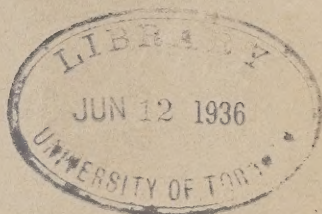
OF THE

## Harbour Commissioners of Montreal

*For The Year 1935*



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COMMISSIONERS:

E. HAWKEN, President

COL. A. E. DUBUC

B. J. ROBERTS



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## Harbour Commissioners of Montreal

MONTREAL, 15th April, 1936.


To the Hon. C. D. HOWE, M.P.,  
Minister of Marine,  
Ottawa, Ont.

Sir:—

In compliance with Section 51 of the Commissioners' Act, 57-8 Victoria, Chapter 48, the Harbour Commissioners of Montreal herewith respectfully submit their Annual Report of operations for the year ended 31st December, 1935.

We have the honour to be,  
Sir,

Yours very respectfully,  
**E. HAWKEN**, President.  
**A. E. DUBUC**,  
**B. J. ROBERTS**,  
Harbour Commissioners.



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# Harbour Commissioners of Montreal

## ANNUAL REPORT

1935

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### THE YEAR'S ACTIVITIES

A study of the year's activities at the Harbour of Montreal reveals cause for considerable satisfaction. Business in general through the Port was on a more intensive scale, and the various operations of the Harbour Commissioners show the result of this increased volume of trade, with the exception of the cold storage warehouse, which experienced the worst year in its history, and the railway traffic department, which was adversely affected by several factors, one of which was the almost complete disappearance of the export cattle movement.

The following were the outstanding developments of 1935:

- (a) a gratifying increase in Harbour revenue.
- (b) substantial gains in tonnage of merchandise handled through the Port.
- (c) an increase in tonnage of ocean shipping, and in number and tonnage of inland shipping.
- (d) new high records in total tonnage of imports, in receipts of oil, and in imports of foreign coal and coke by vessel.

- (e) increase in passenger traffic.
- (f) gains in export of Canadian grain, and in import of foreign grain.
- (g) important and extensive dredging programme in the Harbour undertaken by the Dominion Government.
- (h) extensive construction programme on Harbour works carried out under the provisions of the Public Works Construction Act.

### Financial.

Income on revenue account in 1935 amounted to \$4,041,830.99, an increase of \$475,322.31 over the figure for the previous year. In the items comprising revenue, the largest increase was recorded in income from the grain elevator system, which showed a gain of \$312,126.29 over 1934. Wharfage rates increased by the amount of \$115,013.26 over 1934, to the substantial total of \$1,354,388.67. Income from shed rentals, and rental of Harbour spaces also resulted in small increases, while sundry receipts on revenue account showed a gain of more than \$70,000.00. Decreases were experienced in revenue from storage warehouse, which was \$33,008.40 less than in 1934, and in receipts from railway traffic, which dropped by \$7,617.57.

Expenditure on operation, maintenance, repairs, etc., amounted to \$2,394,976.28, as compared with \$2,246,909.38 in 1934. Interest on Government debentures amounted to \$2,523,954.04.

Expenditure on capital account was \$573,247.98, the largest items of which were represented by Windmill Point wharf reconstruction, extension to marine tower jetty at Elevator No. 3, and the purchase of three new steam locomotives.



# FINANCIAL STATEMENT

## HARBOUR COMMISSIONERS OF MONTREAL

The statement of Income and Expenditure for the year ended 31st December, 1935, exhibits the financial transactions of the Board, for the period. The same, certified by the Acting Port Manager and the Secretary, and verified by the Auditors, follows:—

ITEMS	TOTAL	GRAND TOTAL	ITEMS	TOTAL	GRAND TOTAL
<b>INCOME ON REVENUE ACCOUNT</b>			<b>EXPENDITURE ON REVENUE ACCOUNT</b>		
Grain Elevator System.....	\$ 1,355,923.05		Grain Elevator System, operation, maintenance and repair.....	\$925,133.35	
Railway Traffic Department.....	357,754.05		Railway System, operation, maintenance and repair.....	390,038.80	
Storage Warehouse.....	103,552.99		Storage Warehouse, operation, maintenance and repair.....	190,033.85	
Harbour Sheds, Hoists, etc.....	1,354,585.67		Harbour Sheds, Hoists, etc., maintenance and repair.....	122,501.60	
Rental of Harbour Spaces and Land.....	288,407.75		Wharves, piers, and wharfage, maintenance and repair (including lighting, etc.).....	415,829.62	
Sundry Receipts on Revenue Account, interest, etc.....	214,077.64				
	9,060.10				
<b>Total Income on Revenue Account.....</b>	<b>\$ 4,041,830.09</b>				
<b>RESULTS ON CAPITAL ACCOUNT</b>					
Dominion Government—advances on loans, under Act 19-26, George V., Chapter 17.....		74,000.00			
<b>Grand Total Receipts.....</b>	<b>\$ 4,808,830.09</b>				
Balances at 31st December, 1935.....	\$ 4,808,830.09		Police Service on wharves.....	62,163.95	
Sinking Fund Reserve Account at Dec. 1934.....			Administrative & General Expense.....	306,432.84	
Add: Reserve from Revenue, 1935.....	3,757,620.00		Sundry Expenditures on Revenue.....	189,121.37	
	685,180.00		Sinking Fund Reserve—Government Donations.....	183,120.81	
<b>Total Sinking Fund Reserve at 31st Dec. 1935.....</b>	<b>\$ 4,312,800.00</b>		<b>Total Operation, Maintenance, Repairs and General Expense.....</b>	<b>\$2,394,076.28</b>	
<b>Total balances at 31st December, 1935.....</b>	<b>\$ 1,531,245.04</b>		Interest on Government Debentures.....	2,023,954.04	
<b>Total balances at 31st December, 1934.....</b>	<b>\$ 6,449,625.68</b>		Sinking Fund Reserve—Government Donations.....	585,180.00	
Difference in balances, to add.....		\$ 2,401,721.51	Reserve for bad debts.....	5,610.15	
			<b>Total Expenditure on Revenue Account.....</b>	<b>\$5,509,730.77</b>	
			<b>EXPENDITURE ON CAPITAL ACCOUNT</b>		
			Harbour Dredging—Dredging of the main portion of the Harbour to same depth as Ship Channel.....	2,143.94	
			Dredging of Shore Channel, Sections 61 to 76 and 80 to 101.....	44,179.03	
			<b>Total Harbour Dredging.....</b>	<b>46,323.87</b>	
			Wharves & Piers:—		
			High Level Wharf, Beekerville Reconstruction North Wharf—Windmill Point.....	4,420.17	
			Reconstruction of Railway No. 7, Windmill Point.....	176,623.10	
			High Level Shore Wharves, Sections 25-35.....	929.44	
			Filling Depression, Rear of Wharves, Sections 35-40.....	5,044.28	
			Reconstruction of Southland Pier, Sections 45, 46 & 47.....	52,757.12	
			<b>Total Wharves &amp; Piers.....</b>	<b>5,210.05</b>	
			<b>Total, Wharves &amp; Piers.....</b>	<b>249,384.16</b>	
			Railway System:—		
			Extension of Three New Steam Locomotives—6-wheel, switcher type.....	119,300.14	
			Raising of Tracks, Sections 35 to 40.....	103,350.00	
			<b>Total, Railway System.....</b>	<b>15,950.14</b>	
			Grain Elevator System:—		
			Extension to 3rd Avenue Extension to Avenue Tower Jolly.....	119,300.14	
			<b>Total, Grain Elevator System.....</b>	<b>103,350.00</b>	
			Electric Power System:—		
			Harbour Lighting System, north wharves, Sections 27-39.....	335.23	
			<b>TOTAL Expenditure on Capital Account.....</b>	<b>\$72,217.38</b>	
			Balances at 31st December, 1935:—		
			Cash in Bank and on hand.....	655,808.01	
			Beekerville Pier Shed reserve fund.....	49,830.57	
			Accounts Receivable—current.....	415,725.42	
			Debtors.....		
			Accrued Grain Storage.....	\$11,444.38	
			Stores, Accruals, Deferred charges, expense, etc.....	286,412.15	
			<b>Total balances at 31st Decem-ber, 1935.....</b>	<b>\$1,571,035.95</b>	
			<b>Total balances at 31st Decem-ber, 1934.....</b>	<b>1,136,452.20</b>	
			Difference in balances, to add.....		
			<b>GRAND TOTAL.....</b>	<b>\$6,517,552.90</b>	

Certified:  
ALEX. FREDERSON,  
Acting Port Manager.

Verified:  
McDOWALL, CHAPMAN & Co., C.A.,  
Auditors.

Certified:  
T. H. A. AMENDY, C.M.A.,  
Secretary.



Revenues of the Harbour Commissioners of Montreal for the past five years have been as follows:

1931.....	\$4,500,457.59
1932.....	4,407,497.19
1933.....	3,874,445.43
1934.....	3,566,508.68
1935.....	4,041,830.99

Revenue increase in 1935 represents 13%, while increase in operation and maintenance expenditure represents 6%.

### **Ships and Shipping Tonnage.**

The number of ocean ship arrivals in 1935 came within striking distance of the high figure established in the previous year, and the net registered tonnage was the second highest in the Port's history.

The following are the numbers and net registered tonnage of the three classifications of ships which come to the Port of Montreal:

	No. of Ships	Net Regd. Tonnage
Trans-atlantic.....	1,058	3,972,697
Coasting.....	747	1,138,327
<hr/>		
Total Ocean-going.....	1,805	5,111,024
Inland.....	3,920	3,405,018
<hr/>		
Grand Total.....	5,725	8,516,042

Two new shipping services were inaugurated during 1935—a new African service by the Silver Line, with Montreal Shipping Co. as agents, and a new service from Australia to Montreal by the International Mercantile Marine.

Water levels in the Harbour and ship channel were consistently higher during the latter part of the season of 1935 than for the previous few years, the rise having been as much as two feet over the previous year's low levels.

All branches of passenger business through the Port were more active in 1935 than in the previous year, gains having been recorded in trans-atlantic, coasting and inland passenger totals.

The import of foreign grain, most of which was for re-forwarding to United States destinations, again contributed materially to the shipping business of the Port. In all, 56 vessels arrived during the season with cargoes of grain from the Argentine, South Africa and Poland.

The flags of fourteen nations were represented in the year's shipping arrivals, with British, Canadian and Norwegian shipping having accounted for 91% of the total between them. Other countries well represented were the United States, Sweden, Denmark, Greece, Germany and Holland.

The number of passenger liners, including trans-atlantic and coasting, which arrived during the season increased to 200, as compared with 180 in the previous year.

Trans-atlantic vessel arrivals at the Port in the past five years have been as follows:—

	Number	Net Regd. Tonnage
1931.....	811	3,425,107
1932.....	963	3,676,172
1933.....	1,061	3,822,586
1934.....	1,036	3,741,063
1935 .....	1,058	3,972,697

### **Tonnage of Merchandise.**

Total tonnage of import, export and domestic merchandise handled through the Port of Montreal in 1935 was 11,654,426 tons, the largest total for the past seven years, and an increase of 328,621 tons over the previous year's figure. Exports increased slightly, due mainly to larger outward grain shipments; domestic tonnage was less by some 200,000 tons, which was more than accounted for by a decrease in receipts of Nova



Scotia bituminous coal; and imports again established a new high record, with an increase over 1934 of almost half a million tons.

Seven or eight years ago, Montreal was known primarily as a grain exporting Harbour, and correctly so, as in 1928 grain exports amounted to 5,653,690 tons of the total tonnage of 12,589,126 tons, or 45% of the total. In 1935, as an example of how completely this situation has altered, grain exports amounted to 1,175,685 tons, of the total of 11,654,426 tons, or only 10%.

Import tonnage increased substantially, for the seventh successive year, having gained, in that period, approximately 120%. The largest single increase was accounted for by foreign corn, but important gains were also realized by anthracite coal, woodpulp, petroleum oil, bituminous coal, gasoline, molasses, crude rubber, etc.

The essential part played by bulk cargo commodities in the annual tonnage of the Port is indicated by the fact that three commodities, coal, oil, and grain, accounted for 7,341,062 tons, or 63% of the total.

Other bulk commodities also loom largely in the picture of 1935 business. Importation of woodpulp, which was originated about seven years ago, has developed into a substantial volume. In 1935, receipts of this commodity amounted to 299,787 tons, practically all of which is trans-shipped at Montreal from ocean vessels into canal carriers, for destination to United States ports on the Great lakes. Imports of iron ore, manganese ore, and sulphur reached considerable totals, viz., iron ore, 51,680 tons; manganese ore, 11,773 tons; and sulphur, 18,174 tons. Import of crude rubber, a new development during 1934, increased in 1935 to 19,551 tons. The import of vegetable oils was an important new development of the year under review, and resulted in the following figures:—coconut oil, 8,234 tons; palm oil, 8,076 tons; peanut oil, 7,516 tons; and cotton seed oil, 7,398 tons.

Cattle exports dropped from 32,000 head in 1934 to less than 500 head in 1935. Export of lumber amounted to 49,407 tons, and of hay to 25,727 tons.

The following statement shows the yearly division and total tonnage of merchandise handled in the Harbour of Montreal during the past seven years:—

	Import Tonnage	Export Tonnage	Domestic Tonnage	Total Tons
1929.....	3,256,991	3,418,896	3,260,985	9,936,872
1930.....	3,376,182	3,101,561	3,210,026	9,687,769
1931.....	3,568,542	3,036,835	3,308,997	9,914,374
1932.....	4,036,045	3,926,315	2,782,978	10,745,338
1933.....	4,539,444	2,802,873	3,223,091	10,565,408
1934.....	5,088,209	2,329,511	3,908,085	11,325,805
1935.....	5,570,947	2,393,979	3,689,500	11,654,426

### Coal and Oil Receipts.

Receipts of coal and oil at the Port of Montreal continued to represent an impressive total tonnage during 1935. Import of oil established a new high record for the Port, while a new record was also set up by the figures of foreign coal and coke imported by vessel. The combined tonnage of both commodities amounted to 5,568,768 tons.

Nova Scotia bituminous, and British anthracite were both less than in 1934, but substantial increases were made in British bituminous, and German and Belgian anthracite. A new development was the import of 61,107 tons of Indo-China anthracite, and smaller quantities of German and Polish coke. Total coal and coke receipts amounted to 3,487,504 tons.

The importation of petroleum again established its claim to being ranked as one of the major commodity movements of the Port. Receipts of crude oil, gasoline and refined oil in 1935 amounted to 2,081,264 tons (520,316,000 gallons), an increase of 75,472 tons over the previous highest total.

The ever-growing importance of oil as a force in present-day civilization is revealed in the growth which has taken place during the past ten years in this movement. To-day there exists what might be termed a separate oil harbour in the extreme eastern section of the Port of Montreal, where several oil importing and refining companies are located, each one served by a small industrial wharf, piped for the rapid unloading of crude petroleum and gasoline in bulk from the large ocean tankers. The following figures show how the importation of oil to the Port of Montreal has jumped over 5-year periods:—

1925.....	625,382 tons
1930.....	1,109,415 “
1935.....	2,081,264 “

Classifications of coal and coke receipts during 1935 were as follows:—

Canadian bituminous.....	1,678,115 tons
British anthracite.....	1,230,321 “
British bituminous.....	255,162 “
German anthracite.....	142,272 “
Belgian anthracite.....	93,793 “
Indo-China anthracite.....	61,107 “
U. S. Anthracite.....	8,076 “
German coke.....	7,278 “
U. S. bituminous.....	6,034 “
Polish coke.....	4,277 “
Canadian coke.....	1,069 “

Imports of oil and gasoline in 1935 were as follows:—

Crude oil.....	1,904,229 tons
Gasoline.....	167,409 “
Refined oil.....	9,626 “

### Grain movement.

Total deliveries from the Commissioners' four grain elevators in 1935 amounted to 63,283,084 bushels, an increase of

approximately 7,000,000 bushels over the total for the previous year.

Stocks of grain in store throughout the year were very much greater than for the past few years, and the beneficial effect of this condition is reflected in the improved revenue showing of the grain elevator system.

Imports of foreign grain reached a new high level, of 15,179,910 bushels, consisting mostly of Argentine and South African corn, with smaller quantities of Argentine rye, flax and oats, and Polish rye.

### **Railway Traffic.**

Traffic on the Commissioners' railway system resulted in a decrease of approximately 5% from the total of 1934. Winter business was down by about 10%, due mainly to lighter shipments of coal and grain, and to the falling-off of interchange and local traffic. Contributing factors to the decrease in the year's business were the longshoremen's strike, and the almost total disappearance of the export cattle traffic. Three new steam locomotives were purchased, and placed in service at the close of the year.

### **Construction Activities.**

Two important works were undertaken on capital account during the year 1935—the commencement of reconstruction of the Windmill Point wharf, and the lengthening of the marine tower jetty at Elevator No. 3.

The following works, forming part of the 1934 Public Works Construction Act undertakings, were continued during 1935:—

Paving of Alexandra, King Edward, Jacques Cartier and Victoria Piers.

Raising of the shore wharf at Sections 37, 38, 39 and 40.

Protection work at Elevator No. 3.

Railway embankment at Montreal East.

Reconstruction of raceways at Windmill Point.



The following works, forming part of the 1935 Public Works Construction Act programme, were commenced during the year under review:—

Deepening of navigable waters within the Harbour.

Reconstruction of the downstream side of Laurier Pier.

Reconstruction and extension of Sutherland Pier.

## NEW BOARD OF HARBOUR COMMISSIONERS

By order-in-Council (P.C. 3433), dated 31st October, 1935, the resignations of the following members of the Board of Harbour Commissioners of Montreal, were accepted as of 31st October, 1935:—

- (a) John Caverhill Newman (appointed Commissioner 6th September, 1930, and President, 6th October, 1932)
- (b) Lt.-Col. H. J. Trihey, K.C. (appointed Commissioner 6th September, 1930)
- (c) Alphonse Raymond (appointed Commissioner 6th October, 1932)

The Order-in-Council further recites that, with a view to securing a greater centralized control over the administration and expenditures of Harbour Commissions:—

- (a) Edwin Hawken, Assistant Deputy Minister of Marine, Ottawa
- (b) Col. Arthur E. Dubuc, D.S.O., Chief Engineer, Department of Railways and Canals, Ottawa, and
- (c) Bennett J. Roberts, Assistant Deputy Minister of Finance, Ottawa,

be appointed the Montreal Harbour Commissioners, the first mentioned to be President, effective 1st November, 1935.

At a meeting of the Harbour Commissioners of Montreal, held on 2nd November, 1935, Mr. Alex Ferguson was appointed Acting Port Manager, with all heads of the different branches and activities of the Commission reporting to and through him; and to be responsible to the Commissioners for the efficient and economical administration of all matters coming within the purview of the Montreal Harbour Commissioners.

## SHIPPING

The season of navigation in 1935 commenced on April 15th, and closed on December 9th.

As has been the practice in the past few years, the Dominion Government icebreakers succeeded in pushing their way through to Montreal at an early date, and the ship channel was declared open on March 28th.

The Lachine Canal was opened for traffic on April 24th, and closed on December 8th.

The first trans-atlantic ship to reach Port in 1935 was the S.S. "Marisa Thorden", a Finnish vessel, with a cargo of rye from Danzig-agents, Montreal Shipping Co. Her master, Capt. L. Simola, was presented with the traditional engraved gold-headed cane by the Harbour Commissioners.

The first trans-atlantic passenger liner, S.S. "Duchess of York", arrived on Easter Sunday, April 21st. The last passenger liner of the season, S.S. "Montrose", sailed on November 23rd. The last ocean vessel to leave Port at the end of the season was S.S. "Vardefjell" on December 9th.

The number of ocean ship arrivals in 1935, viz. 1,805, was slightly less than the record number established in the previous year, but the net registered tonnage was slightly greater than in 1934. The returns were less for coasting ships, and greater in the case of trans-atlantic arrivals. The significant increases which have been maintained during the past four or five years in both numbers and net registered tonnage of ocean vessel arrivals (trans-atlantic and coasting combined) may be seen by a glance at the following table:—

	Ocean- going Ships	Net Regis- tered Tonnage
1931.....	1,150	4,069,421
1932.....	1,274	4,250,426
1933.....	1,476	4,546,678
1934.....	1,855	5,007,523
1935.....	1,805	5,111,024

The figures for inland shipping were substantially in advance of those for the preceding year, viz.:—

	Inland vessels	Net Regd. Tonnage
1934.....	3,702	3,305,503
1935.....	3,920	3,405,018

The harbour was very active during the latter part of the season, as in addition to the increased numbers of ocean and inland vessel arrivals, a large number of canal vessels loaded with grain were in Port awaiting their turn at the grain elevators, and the extensive dredging programme put in hand by the Government in the autumn resulted in as many as ten dredges, each one attended by its quota of tugs and scows, being in operation in the upper section of the Port. Notwithstanding this activity, and the consequent increased care required in navigating in the Harbour, no untoward incidents occurred. On June 17th, special arrangements were made to stop traffic at different times during the day and night, when the dredges were working. No ships were held up for any length of time. The superintendents of the dredging companies co-operated with the Commissioners' officers, enabling this somewhat difficult situation to be handled without undue danger or interruption to traffic.

The Harbour Master's department was reorganized during the year, and on July 1st several berthing masters were appointed to assist in the duties incidental to that branch of the Commissioners' activities. Day and night service was maintained during the balance of the season, and on July 17th, Station No. 2 was opened on top of Shed 19, near the Sailors' Memorial Tower, with men on duty keeping track of vessels moving in that part of the Harbour, reporting infractions of rules and by-laws, and giving instructions to passing vessels when necessary. From September until the close of navigation, a daily report was received from the Longue Pointe Signal station. The net result was a more efficient control of ship movements in the Port.



The following table gives the number of vessel movements in the Harbour, with the daily average, during the navigation season of 1935:—

	Total	Daily Average
Ocean arrivals.....	1,058	4.4
Coasting arrivals.....	757	3.1
Ocean sailings.....	1,057	4.4
Coasting sailings.....	744	3.1
Inland arrivals and sailings...	6,568	27.4
Ocean and Coasting moves...	1,605	6.6
Inland moves.....	8,475	35.3
	<hr/> 20,264	<hr/> 84.4

Greatest number of moves in one day:—

Ocean and Coasting....	19 on November 11th
Inland.....	77 on November 10th

In computing the foregoing table, movements of dredges, tugs and scows, the Commissioners' fleet, the Sinmac tugs, and other small craft have not been taken into consideration.

### Navigation By-laws Revised.

During the year, the following navigation By-laws were revised:—

By-law 19—Fumigation of Vessels.

By-law 22—Speed of Vessels.

By-law 23—Anchoring of Vessels.

By-law 40—Day and Night Signals to be displayed by Dredges.

The revision of By-law 22 gives the Commissioners power to issue regulations governing the speed of vessels within the Harbour, and Regulation No. 1 was accordingly issued prescribing maximum speeds for vessels moving within the

Harbour. Although this Regulation was only put into effect late in the season, breakage of ships' moorings was reduced by 35% as compared with the season of 1934.

A cause of frequent complaint for several years past has been the lack of adequate anchoring facilities in the Harbour. The provision of a safe anchorage for at least nine ocean vessels has been adopted as a minimum requirement by the Commissioners' officers, and in accordance with their recommendations, the Government dredging contractors commenced operations on November 12th, working upstream from Buoy 164-M, opposite Section 95. The area being dredged will have the same depth as the ship channel, and will provide room for five vessels to anchor in addition to the four which can now be accommodated at that point. It was also recommended that 500 feet on the South side of the channel, for a length of 9,000 feet, at the Longue Pointe curve, be dredged to ship channel depth, to prevent vessels swinging at anchor from interfering with traffic in the channel. This work will be commenced next year.

Dredging operations were also started to remove the upper section of the Forsyth Shoal, which extends from Sutherland Pier to Canadian Vickers Dry-dock, so as to permit vessels to make a safer entrance to Sutherland Pier. Dredging in the main channel in the upper Harbour was begun on August 21st, and work was also done in enlarging the channel opposite Shed 19, soundings having been started by the Department of Marine in the St. Mary's Current at this point on June 10th.

Range lights were installed to mark the centre line of the entrance channel to Vickers Basin, and were placed in operation on August 5th. Just prior to the close of the previous navigation season, two green range lights had been placed in position on the British American Oil wharf, to mark the entrance to the inner channel at Montreal East.

Other interesting features of the year's shipping activities were as follows:—

A new African service was started by the Montreal Shipping Co. with Silver Line steamers. The Montreal-Far East services, operated by McLean Kennedy Ltd. with Ellerman & Bucknall vessels, was greatly increased. A new service from Australia to Montreal was inaugurated by the International Mercantile Marine. Their first vessel, the S.S. "Jeff Davis" arrived on July 13th. The Manchester Line placed a new vessel, S.S. "Manchester Port" in the Montreal-Manchester service. The St. Lawrence Oil Co. opened a new oil importing service at Section 65, and the Amherst Oil Co. began a new service at Section 110. Canadian Packers Ltd. commenced importing vegetable oil in tankers, discharging their vessels at Section 6 N, Windmill Point. Coal from French Cochin China was imported during 1935 for the first time.

A strike of longshoremen occurred on May 1st. The men resumed work again on May 4th, the agreement between the Shipping Federation and the Longshoremen's Union being signed on May 7th.

Several warships visited the Port during 1935. H.M.S. "York", with Vice-Admiral Sir Matthew Best having remained at Laurier Pier from July 17th to 31st. Other vessels were the H.M.S. "Scarborough" and "Dundee", H.M.C.S. "Saguenay", and the French Gunboat "Ville D'Ys".

Passengers arrived at, and sailed from, Montreal in greater numbers during 1935 than for several years. The following statement gives particulars:—

#### Statement of Passenger Traffic.

	1933	1934	1935
Arrived on ocean vessels . . . . .	28,769	29,451	31,193
“ “ coasting vessels . . . . .	2,132	2,392	2,862
“ “ inland vessels . . . . .	23,438	48,454	49,816
	<hr/>	<hr/>	<hr/>
Total arrivals . . . .	54,339	80,297	83,871

Statement of Passenger Traffic.—(*continued*)

Sailed on ocean vessels.....	36,930	35,496	36,906
“ “ coasting vessels.....	2,406	2,582	3,184
“ “ inland vessels.....	24,840	41,094	42,483
	<hr/>	<hr/>	<hr/>
Total departures....	64,176	79,172	82,573

The statements which follow give classification of vessels and cargoes, statistical particulars of shipping, and dates of opening and closing of navigation:—



### Classification of Inward Cargoes

Cargo	Number of Vessels	Net Registered Tonnage
General.....	596	2,162,270
Coal.....	464	1,250,538
Crude Oil.....	144	703,472
Pulpwood.....	251	290,959
Ballast.....	86	176,708
Maize.....	32	90,292
Woodpulp.....	39	67,687
Sugar.....	27	55,183
Gasoline.....	18	40,545
Rye.....	10	29,508
Crude Oil-Gasoline.....	6	29,383
Tinplate.....	7	24,150
Fuel Oil.....	4	19,030
Molasses.....	5	17,535
Vegetable Oil.....	8	17,370
Sulphur.....	5	15,052
China Clay.....	13	12,907
Gypsum.....	9	12,112
Linseed.....	4	9,956
Manganese Ore.....	3	9,173
Steel and Products.....	10	9,169
Iron Ore.....	3	8,941
Malt.....	8	7,039
Scrap.....	1	4,227
Furnace Oil.....	1	4,185
Binder twine.....	1	3,269
Nitrate of Soda.....	2	3,241
Maize and Linseed.....	1	3,130
Oats.....	1	2,670
Pyrites Sinter.....	1	2,536
Phosphate Rock.....	1	2,516
Refined Oil.....	2	2,479
Potatoes.....	6	2,460
Aluminium.....	1	2,392
Fluorspar.....	3	2,087
Lumber.....	10	2,040
Superphosphate.....	2	1,735
Salt.....	1	1,724
Gas Oil.....	1	1,549
Rice.....	1	1,486
Silver Sand.....	1	1,447
Sulphite Pulp.....	2	1,400
Naphtha.....	1	1,384
Olives—Olive Oil.....	1	910
Fish.....	1	910
Coarse Salt.....	1	905
Wood.....	7	634
Fish Meal.....	1	445
Seal Oil.....	2	284
	1,805	5,111,024

### Classification of Outward Cargoes

Cargo	Number of Vessels	Net Registered Tonnage
General.....	706	2,361,868
Ballast (See Note).....	905	2,345,854
Grain.....	62	169,306
Fuel Oil.....	11	44,053
Gasoline.....	16	40,435
Grain I.T.....	20	23,173
Cement.....	10	13,911
Flour I.T.....	13	11,093
Vegetable Oil I.T.....	3	9,104
Sulphur I.T.....	3	8,791
Coal I.T.....	11	8,214
Scrap.....	3	7,801
Woodpulp I.T.....	3	7,692
Bauxite I.T.....	2	6,878
Gasoline-Oil.....	2	6,090
Bunker Fuel Oil.....	2	5,352
Soya Bean Meal I.T.....	6	4,376
Creosote.....	1	4,339
Automobiles.....	1	4,263
Furnace Oil I.T.....	1	4,185
Automobiles I.T.....	5	4,083
Logs.....	2	3,983
Newsprint.....	2	3,344
Ore I.T.....	3	3,324
Hay.....	2	2,246
Zinc Slabs and Concentrates.....	1	2,018
Zinc.....	1	1,568
Stove Oil.....	1	1,384
Sulphates.....	1	1,055
Machinery I.T.....	1	773
Calcium Chloride I.T.....	1	561
	<hr/> 1,801	<hr/> 5,111,117
Note:—Lake Boats.....	285	
Tramps.....	268	
Dom. Coal Boats.....	175	
Tankers.....	164	
Various.....	13	
	<hr/> 905	

## PORT OF MONTREAL

Nationalities and Tonnage of Sea-Going Vessels that arrived  
at the Port of Montreal during the Season of 1935,  
which were navigated by 81,143 Seamen.

Nationality	Number of Vessels	Net Registered Tonnage
British .....	731	3,088,993
Canadian .....	645	957,218
Norwegian .....	276	641,596
American .....	40	132,031
Swedish .....	30	70,100
Danish .....	26	49,015
Greek .....	18	51,747
German .....	17	53,010
Dutch .....	13	44,043
Finnish .....	3	7,660
French .....	3	7,410
Japanese .....	1	4,227
Latvian .....	1	2,452
Danzig .....	1	1,522
	1,805	5,111,024

N.B.—Of the above vessels 42 were built of wood with a net registered tonnage of 3,782.

# PORT OF MONTREAL

Combined Statement showing the number and net tonnage of vessels that arrived at the Port of Montreal during the past ten years

YEAR	TRANS-ATLANTIC		MARITIME PROVINCES AND NEWFOUNDLAND		INLAND		TOTAL	
	Vessels	Tonnage	Vessels	Tonnage	Vessels	Tonnage	Vessels	Tonnage
1926.....	1,042	3,551,489	379	670,241	6,197	5,223,974	7,618	9,445,704
1927.....	1,231	4,252,325	379	740,161	6,188	5,664,942	7,798	10,657,428
1928.....	1,222	4,693,925	385	800,137	5,873	5,632,722	7,480	11,126,784
1929.....	916	3,910,679	367	727,121	5,085	4,368,317	6,368	9,006,117
1930.....	826	3,740,884	371	693,705	4,255	3,975,946	5,452	8,410,535
1931.....	811	3,425,107	339	644,314	4,000	3,770,753	5,150	7,840,174
1932.....	963	3,676,172	311	574,254	4,094	3,755,442	5,368	8,005,868
1933.....	1,061	3,822,586	415	724,092	4,413	3,868,274	5,889	8,414,952
1934.....	1,036	3,741,063	819	1,266,460	3,702	3,305,503	5,557	8,313,026
1935.....	1,058	3,972,697	747	1,138,327	3,920	3,405,018	5,725	8,516,042

Statement showing the dates of the opening of Navigation and the Closing thereof, the First Arrival and the Last Departure for Sea; also the greatest Number of Vessels in the Port at one time, during the past ten years.

Year	Opening of Navigation	Closing of Navigation	First Arrival from sea	First Departure for sea	Greatest Number of Vessels in port at one time		
					Sea-going		Inland
					No.	Date	No. Date
1926. ....	May 2nd	Dec. 6th	May 3rd	Dec. 6th	60	May 19th	66 Sept. 7th
1927. ....	April 10th	Jan. 4/28	April 12th	Dec. 6th	80	Oct. 20th	44 May 1st
1928. ....	April 26th	Jan. 6/29	April 26th	Dec. 9th	61	Nov. 19th	43 Aug. 13th
1929. ....	April 10th	Dec. 10th	April 20th	Dec. 7th	53	July 3rd	47 Oct. 7th
1930. ....	April 12th	Dec. 12th	April 21st	Dec. 12th	50	May 14th	41 Sept. 12th
1931. ....	Mar. 19th	Dec. 13th	April 15th	Dec. 11th	53	May 27th	29 Oct. 31st
1932. ....	April 14th	Dec. 13th	April 18th	Dec. 7th	53	Nov. 23rd	49 May 2nd
1933. ....	Mar. 23rd	Dec. 14th	April 14th	Dec. 6th	40	Nov. 1st	34 Sept 15th
1934. ....	April 26th	Dec. 8th	April 26th	Dec. 8th	42	Nov. 5th	33 July 12th
1935. ....	April 15th	Dec. 9th	April 15th	Dec. 9th	52	Nov. 12th	44 Sept. 29th

## GRAIN ELEVATOR SYSTEM

The export movement through the Port of Montreal of Canadian and United States grain was only slightly greater during 1935 than in the previous year, when a new low record for recent years had been established.

Notwithstanding this fact, however, the actual operation of the Commissioners' four grain elevators revealed considerable improvement, due to the following two factors, viz. (1) a substantial increase in the receipts of foreign grain imported via Montreal, and (2) the fact that the elevators were well filled throughout the season of navigation with large stocks brought down from the Head of the Lakes and held at Montreal for export.

The latter condition was a decided contrast with the state of affairs in this respect during the past few years. It was thought at the beginning of the season that this was an indication of a more intensive export movement, but although May shipments showed an improvement over recent years, successive months continued sluggish on an unprecedented scale, despite the continuous availability of large stocks in store at Montreal, and the presence of ample ocean tonnage at all times.

During the last two months of the navigation season, October and November, exports became fairly brisk, and shortly after navigation closed at Montreal, it was announced that the Argentine crop was unusually small, and that that country had pegged the price of its export grain at a figure considerably above that at which recent scales had been effected. It is anticipated that this development will have an important influence on exports of grain from Montreal next season, and it is understood that considerable tonnage was chartered during the winter months to load grain cargoes at this Port on the opening of navigation.



For the first time in a great many years, no United States wheat was exported through Montreal in 1935, shipments of that country's grains through this Port having been confined to soya beans in bulk, and a small quantity of corn. Exports of Canadian wheat were less than in 1934, but shipments of Canadian oats, barley, rye, flax, buckwheat and corn all showed increases.

The following statement shows deliveries of Canadian and United States grain from the four elevators during 1935:—

	Bushels
Canadian wheat.....	31,419,924
“    oats.....	8,826,730
“    barley.....	5,697,261
“    rye.....	663,645
“    flax.....	348,110
“    buckwheat.....	335,860
“    corn.....	15,978
United States soya beans....	845,115
“    “    corn.....	62,237

The import of foreign grain through Montreal was continued on a substantial scale during 1935. A total of 56 ocean ships arrived in port with this grain during the navigation season, to the extent of over 15,000,000 bushels, most of which was for reforwarding to United States points. It represented 420,415 tons of additional imports through the Harbour of Montreal. The following table gives particulars of this movement:—

	Bushels
Argentine corn.....	6,398,187
South African corn.....	4,341,863
Argentine rye.....	1,675,073
Argentine flax.....	1,207,583
Polish rye.....	1,136,992
Argentine oats.....	420,212
	<hr/>
	15,179,910

Total deliveries from the elevators in 1935 amounted to 63,283,084 bushels, divided as follows between the four elevators:—

	Bushels
Grain Elevator No. 1.....	20,986,876
“ “ No. 2.....	23,529,382
“ “ No. 3.....	11,572,360
“ “ “B”.....	7,194,466
	<hr/>
	63,283,084

Deliveries by months during the navigation season were as follows:—

	Bushels
May.....	10,276,258
June.....	4,960,621
July.....	5,649,272
August.....	6,901,614
September.....	7,635,443
October.....	10,968,954
November.....	12,580,027

	Wheat	Oats	Barley	Corn	Rye	Flax	Buck- wheat	Soy. Beans	Total
Jan.....	2,636	.....	1,293	3,121	.....	.....	.....	.....	7,050
Feb.....	3,988	2,402	.....	.....	.....	.....	.....	.....	6,390
March.....	3,736	2,569	1,354	.....	.....	.....	.....	.....	7,659
April.....	798,743	52,518	.....	435,503	1,130,026	445,391	24,553	.....	2,886,731
May.....	4,013,213	1,659,682	101,659	845,306	1,681,392	574,560	14,577	.....	8,890,389
June.....	3,493,865	1,246,398	985,816	1,081,091	20,590	49,911	72,271	.....	6,949,942
July.....	4,489,463	614,675	667,151	2,473,681	375,289	.....	7,185	.....	8,627,444
Aug.....	4,136,591	435,505	675,171	1,899,748	81,871	71,991	1,204	.....	7,302,081
Sept.....	5,238,209	652,817	410,963	1,786,864	60,222	25,385	.....	.....	8,174,460
Oct.....	6,219,193	2,029,414	1,222,317	1,302,138	.....	78,246	37,105	.....	10,888,413
Nov.....	4,943,714	2,388,506	1,036,748	929,320	.....	284,865	117,797	748,919	10,449,869
Dec.....	524,599	154,147	82,661	1,986	.....	25,344	4,996	96,665	890,398
Total.....	33,867,950	9,238,633	5,185,133	10,758,758	3,349,390	1,555,693	279,688	845,584	65,080,829

## SUMMARY OF GRAIN DELIVERIES ELEVATORS 1-2-3- &amp; B, 1935

	Wheat	Oats	Barley	Corn	Rye	Flax	Buck- wheat	Soy. Beans	Total
Jan.....	263,459	92,734	37,287	33,559	2,600	.....	25,802	.....	455,441
Feb.....	611,020	135,636	101,725	31,254	3,600	.....	.....	.....	883,235
March.....	195,986	95,473	53,229	49,558	2,600	.....	362	.....	397,208
April.....	811,967	121,220	111,405	71,756	248,170	123,800	4,457	.....	1,492,775
May.....	3,564,490	1,604,664	585,955	1,194,973	2,419,429	855,672	51,075	.....	10,276,258
June.....	1,386,740	1,122,923	688,296	1,354,552	339,151	40,479	28,480	.....	4,960,621
July.....	1,404,067	819,070	733,242	2,354,742	250,285	49,911	37,955	.....	5,649,272
Aug.....	3,779,569	472,654	738,336	1,724,858	87,335	71,991	26,871	.....	6,901,614
Sept.....	5,187,137	586,289	331,577	1,438,362	66,693	25,385	.....	.....	7,635,443
Oct.....	6,801,987	1,873,143	1,088,052	1,108,731	12,811	51,179	33,051	.....	10,968,954
Nov.....	6,912,543	2,258,766	1,128,511	1,141,356	36,286	311,932	120,695	669,938	12,580,927
Dec.....	500,959	64,370	99,646	202,878	6,750	25,344	7,112	175,177	1,082,236
Total.....	31,419,924	9,246,942	5,697,261	10,706,579	3,475,710	1,555,693	335,860	845,115	63,283,084

## SUMMARY OF GRAIN HANDLING

### Elevators 1-2-3 & B, 1935

	Receipts	Deliveries
January.....	7,050	455,441
February.....	6,390	883,235
March.....	7,659	397,208
April.....	2,886,734	1,492,775
May.....	8,890,389	10,276,258
June.....	6,949,942	4,960,621
July.....	8,627,444	5,649,272
August.....	7,302,081	6,901,614
September.....	8,174,460	7,635,443
October.....	10,888,413	10,968,954
November.....	10,449,869	12,580,027
December.....	890,398	1,082,236
	<hr/> <u>65,080,829</u>	<hr/> <u>63,283,084</u>

	Receipts		Deliveries
Water.....	60,961,911	Steamers Export.	43,624,290
Rail.....	3,926,502	Steamers Other ..	11,545,966
Trucks.....	192,416	Cars Export .....	103,557
		Cars.....	5,867,118
		Waggon's Export	61,764
		Waggon's.....	2,080,389
	<hr/> <u>65,080,829</u>		<hr/> <u>63,283,084</u>

First Vessel Unloaded—April 16th, 1935.

Last Vessel Unloaded—Dec. 9th, 1935.

		Bushels
650 Vessels .....		60,961,911
1026 C.N. cars	} 2090 cars.....	1,886,375
1064 C.P. cars		2,040,127
776 Trucks.....		192,416
		<hr/> <u>65,080,829</u>
Stocks in elevators (at December 31st, 1935)...		11,055,640

# STATEMENT SHOWING DESTINATION OF EXPORT GRAIN, 1935

(Bulk Grain Deliveries Direct to Vessel)

(Bushels)

COUNTRY	WHEAT	OATS	BARLEY	RYE	BUCK- WHEAT	SOYA BEANS	TOTAL
Algeria.....	67,200	.....	.....	.....	.....	.....	67,200
Belgium.....	4,135,372	18,823	.....	155,745	52,689	.....	4,362,629
Denmark.....	598,359	.....	.....	42,558	.....	37,333	678,250
Finland.....	433,999	.....	.....	.....	.....	.....	433,999
France.....	704,947	.....	.....	.....	.....	11,040	715,987
Germany.....	75,200	.....	.....	.....	.....	175,176	250,376
Great Britain.....	13,472,496	6,838,655	4,431,180	85,710	.....	364,799	25,192,840
Holland.....	897,152	635,248	110,000	64,284	223,620	96,507	2,026,811
Ireland, Northern.....	407,889	103,532	145,831	.....	.....	.....	657,252
Irish Free State.....	1,726,220	.....	8,333	.....	.....	.....	1,734,553
Italy.....	12,800	84,700	.....	.....	.....	.....	97,500
Norway.....	1,492,957	.....	.....	275,921	.....	.....	1,768,878
Sweden.....	366,566	.....	.....	.....	.....	160,257	526,823
Unknown.....	4,891,933	127,058	95,833	.....	.....	.....	5,114,824
Total.....	29,283,090	7,808,016	4,791,177	624,218	276,309	845,112	43,627,922

## EXTENT OF WHARVES

The extent of the Wharves and Piers at the end of the season of 1935 is as follows:—

30 ft. depth, and over, at			
O.L.W.....	39,471 lin. ft. or	7.4756	miles
25 ft. to 30 ft. depth.....	14,643      “	2.7733	“
<hr/>			
Total deep draft.....	54,114      “	10.2489	“
20 ft. depth and under.....	1,824      “	0.3454	“
<hr/>			
Total wharfage, end of 1935	55,938      “	10.5943	“
Total wharfage, end of 1934	55,288      “	10.4711	“
<hr/>			
Increase in 1935.....	650      “	0.1232	“

## EXTENT OF RAILWAY TRACKS

The extent of the Harbour Commissioners' railway tracks at the end of 1935 is as follows:—

	Lin. ft.	miles
South of Lachine Canal—Windmill Point Wharf, Bickerdike Pier, and West.....	50,517	9.5676
To Guard Pier.....	9,270	1.7557
Sections 11-46, high level, main line.	56,336	10.6697
To piers, elevators, cross-overs, sidings, etc.....	114,575	21.6998
Sections 35-46, low level, main line...	9,850	1.8655
Sections 46-101, high level, main line.	53,238	10.0829
To wharves, industries, etc.....	48,226	9.1337
<hr/>		
Grand total tracks, end of 1935...	343,012	64.7749



## CAR HANDLING

The following table gives mileage of Harbour railway tracks, and number of cars handled during the past ten years:

	Mileage	Cars handled
1926.....	65.19	205,481
1927.....	67.44	195,853
1928.....	67.99	240,622
1929.....	68.42	242,967
1930.....	69.28	205,082
1931.....	69.60	185,155
1932.....	69.55	164,060
1933.....	69.82	150,327
1934.....	69.52	163,154
1935.....	64.77	154,620

## COMMODITY TONNAGE STATEMENT

The combined tonnage of import, export and domestic merchandise which was handled through the Port of Montreal in 1935 amounted to 11,654,426 tons.

This total, which represented an increase of 328,621 tons over the figure for 1934, has only been exceeded twice in the history of the Port, and that in the banner years of 1927 and 1928, when the totals were swelled by grain exports three times as great as in 1935. The tonnage total above mentioned is considered particularly satisfactory in view of the fact that receipts of Nova Scotia bituminous coal were less by some 250,000 tons, and that shipments of grain, which had reached an unusually low figure in 1934, were only slightly greater during 1935.

Import tonnage again established a new high record, and continued the substantial increases which have been a feature of the Port's development for seven successive years. In the

years from 1928 to 1935, import tonnage has more than doubled, as may be seen from the following interesting table:—

Imports	
1928.....	2,543,685 tons
1929.....	3,256,991 tons
1930.....	3,376,182 tons
1931.....	3,568,542 tons
1932.....	4,036,045 tons
1933.....	4,539,444 tons
1934.....	5,088,209 tons
1935.....	5,570,947 tons

Unfortunately, in the same period, export tonnage has declined on a corresponding, if not actually greater, scale, due almost entirely to the very much smaller volume of export grain passing through the Port. In 1935 exports amounted to 2,393,979 tons, an increase of some 64,000 tons over the previous year. Of this total, grain in bulk represented 1,175,685 tons. Domestic commodity tonnage decreased by approximately 210,000 tons from the previous year, which was more than accounted for by the drop in receipts of Nova Scotia bituminous, already referred to.

It is interesting to point out that although there are approximately 600 commodities or groups of commodities listed in the detailed figures of imports through the Harbour of Montreal each year, and some 400 in the export list, three commodities alone out of this total of 1,000 represent 63% of the total tonnage of the Port. These three commodities are amongst the most essential of the world's needs, viz. wheat, coal and oil. The extent to which they form the major portion of the Port's business may be gauged from the following list:

Total coal receipts.....	3,487,504 tons
Total oil imports.....	2,081,264 “
Bulk grain exports.....	1,175,685 “
Foreign grain imports.....	420,415 “
Grain for local delivery.....	176,194 “
Total.....	7,341,062 tons

It should be pointed out that imports of oil (including crude petroleum, gasoline and refined oil) established a new high record, as also did the imports of foreign coal and coke by vessel.

The following comparative statement shows the division of tonnage of merchandise for the past three years:—

	1933	1934	1935
	tons	tons	tons
Imports.....	4,539,444	5,088,209	5,570,947
Exports.....	2,802,873	2,329,511	2,393,979
Domestic.....	3,223,091	3,908,085	3,689,500
	<hr/> 10,565,408	<hr/> 11,325,805	<hr/> 11,654,426

The most notable increases in imports were: corn in bulk (249,807 tons), anthracite coal (109,338 tons), woodpulp (91,558 tons), petroleum oil (44,112 tons), bituminous coal (33,496 tons), gasoline (31,390 tons), molasses (26,400 tons), crude rubber (14,867 tons), sand (9,944 tons), black sheets (6,061 tons), unhulled rice (5,948 tons), black plates (5,816 tons), iron & steel (5,584 tons), binder twine (5,167 tons), and smaller increases in liquors, glass sheets, dry goods, tea, china clay, toys, fire brick and tin plates. Decreases were recorded in rye in bulk (79,913 tons), barley in bulk (29,579 tons), iron ore (21,073 tons), manganese ore (17,513 tons), coke (15,869 tons), flax in bulk (13,675 tons), raw fruit (12,641 tons), sulphur (9,768 tons), as well as smaller decreases in muriate of potash, oats in bulk, flour, salt and raw sugar.

Although exports of grain in bulk increased by some 50,000 tons over 1934, it was entirely accounted for by the coarse grains, as exports of wheat decreased by over 120,000 tons. Substantial increases were noted in several export commodities, viz. oats in bulk (86,823 tons), copper bars (42,861 tons), barley in bulk (41,699 tons), soya beans in bulk (25,353 tons), rye in bulk (14,238 tons), copper cathodes (17,377 tons), raw fruit (11,624 tons), vegetables in tins (8,466 tons), automobiles & parts (7,638 tons), nickel matte

(7,529 tons), creosote oil (6,497 tons), spelter (5,310 tons), and to a smaller extent in catsup, rolled oats, buckwheat, fuel oil, dry goods, oats in bags, bran, asbestos and agricultural implements. In addition to the decrease in export of wheat mentioned above, there were also decreases in exports of lard (48,961 tons), copper rods (43,329 tons), copper matte (7,129 tons), fresh meats (6,305 tons), iron & steel scrap (6,245 tons), and in cured meats, cement, cereals, soup in tins, and flour. Export of cattle, which in 1934 had amounted to over 32,000 head, dropped to less than 500 head.

Increases in domestic commodities were as follows:—gasoline (110,300 tons), fuel oil (59,054 tons), grain for local delivery (10,849 tons), crushed stone (10,749 tons), refined sugar (10,037 tons), molasses (9,457 tons), sand (9,085 tons), and also in cement, flour, hay, iron & steel, coal oil and creosote oil. Decreases were as follows:—bituminous coal (243,010 tons), crude oil (134,340 tons), lubricating oil (28,880 tons), and also lumber and gypsum.

The following statements give details of the movement of all commodities, import, export and domestic, of which more than 1,000 tons were handled:—

### PRINCIPAL IMPORTS

	tons
Crude petroleum oil, in bulk.....	1,866,000
Anthracite coal.....	1,526,125
Corn in bulk.....	300,722
Woodpulp.....	299,787
Bituminous coal.....	260,319
Raw sugar.....	225,477
Gasoline in bulk.....	111,767
Rye in bulk.....	78,720
Tin plates.....	54,058
Molasses.....	53,852
Iron ore.....	51,680
Iron & Steel skelps, strips, etc.....	46,852
Raw fruit.....	37,705

	tons
Flax in bulk.....	33,811
Dry goods.....	27,943
Coarse salt.....	22,020
Crude rubber.....	19,551
Glass sheets.....	18,779
Sulphur.....	18,174
Sand.....	16,889
Dried fruit.....	16,473
Black sheets.....	15,885
Black plates.....	13,746
China clay.....	12,935
Unhulled rice.....	12,153
Toys.....	12,035
Manganese ore.....	11,773
Coke.....	11,558
Binder twine.....	10,939
Fire brick.....	10,912
Liquors.....	9,654
Tea.....	9,220
Glassware.....	8,411
Phosphate, n.o.s.....	8,321
Coconut oil.....	8,234
Palm oil.....	8,076
Cocoa beans.....	7,534
Peanut oil.....	7,516
Yarns.....	7,476
Cotton seed oil.....	7,398
Oats in bulk.....	7,144
Earthenware.....	7,058
Whiting.....	6,959
Muriate of Potash.....	6,503
Coconuts.....	6,112
Fruit in tins.....	6,073
Raw vegetables.....	5,926
Coffee.....	5,876
Galvanized sheets.....	5,613
Lithopone.....	5,361

	tons
Jute cloth.....	5,332
Wool.....	5,277
Burnt clay.....	5,203
Nitrate of soda.....	4,634
Wines.....	4,122
Edible nuts.....	3,969
Meats in tins.....	3,897
Calcium chloride.....	3,749
Chemicals, n.o.s.....	3,240
Machinery, n.o.s.....	3,134
Canada plate.....	3,034
Garden bulbs.....	2,889
Pig iron.....	2,760
Wool tops and noils.....	2,759
Flour.....	2,581
Bauxite.....	2,571
Steel wire in coils.....	2,509
Crockery.....	2,483
Fluorspar.....	2,483
Automobiles and parts.....	2,475
Furniture.....	2,327
Rubber manufactures.....	2,303
Zinc oxide.....	2,273
Rags.....	2,257
Pebbles.....	2,166
Oyster shells.....	2,106
Superphosphates.....	2,098
Paper, various, n.o.s.....	2,029
Cured fish.....	2,023
Fruit in brine.....	2,016
Books.....	1,900
Raw cotton.....	1,847
Olive oil.....	1,790
Copper matte residue.....	1,727
Dry colours.....	1,694
Confectionery.....	1,627
Sulphate of potash.....	1,610



	tons
Barytes.....	1,596
Carpets and matting.....	1,553
Millinery.....	1,527
Sulphate of soda.....	1,451
Tobacconists' sundries.....	1,447
Wax.....	1,442
Tallow.....	1,413
Dyes.....	1,393
Fish in tins.....	1,366
Shrubs.....	1,363
Sulphide of soda.....	1,357
Cyanide of soda.....	1,332
Mineral water.....	1,294
Bicycles & parts.....	1,290
Settlers' effects.....	1,239
Cork waste.....	1,163
Hides.....	1,144
Druggists' sundries.....	1,139
Chinaware.....	1,118
Biscuits.....	1,060
Raw leaf tobacco.....	1,055
Tiles.....	1,043
Paper stock.....	1,026
Castor oil.....	1,024

## PRINCIPAL EXPORTS

	tons
Wheat in bulk.....	878,494
Flour.....	200,651
Oats in bulk.....	132,738
Automobiles and parts.....	124,583
Barley in bulk.....	114,990
Raw fruit.....	62,551
Printing paper.....	52,560
Lumber.....	49,407
Cured meats.....	46,165
Copper bars.....	42,953
Fuel oil.....	34,321
Copper cathodes.....	30,038
Woodpulp.....	29,814
Cheese.....	27,758
Hay.....	25,727
Soya beans in bulk.....	25,353
Copper matte.....	19,732
Pulpboard.....	19,011
Cereals.....	17,888
Rye in bulk.....	17,478
Rubber manufactures.....	17,149
Spelter.....	15,558
Copper rods.....	14,294
Lard.....	12,659
Rolled oats.....	11,786
Vegetables in tins.....	11,677
Catsup.....	11,478
Asbestos.....	10,724
Oats in bags.....	10,221
Ship stores.....	9,519
Bran.....	8,277
Agricultural implements.....	8,193
Soup in tins.....	7,953
Fruit in tins.....	7,785
Nickel matte.....	7,770

	tons
Steel wire in coils.....	7,691
Iron & Steel scrap.....	7,523
Building cement.....	7,326
Dry goods.....	6,828
Crude asbestos.....	6,719
Buckwheat in bulk.....	6,632
Creosote oil.....	6,497
Canned goods.....	6,184
Wallboard.....	5,473
Sulphate of ammonia.....	5,366
Milk in tins.....	5,198
Nickel cathodes.....	5,075
Copper ingots.....	4,982
Hardwood flooring.....	4,662
Iron & Steel piping.....	4,476
Copper cakes.....	4,395
Oilcake meal.....	3,922
Butter.....	3,847
Acetic acid.....	3,819
Fibreboard.....	3,810
Electrical apparatus.....	3,694
Binder twine.....	3,669
Paper, various.....	3,490
Machinery, n.o.s.....	3,449
Fresh or frozen meats.....	3,347
Toys.....	3,289
Stoves.....	3,122
Toilet soap.....	3,085
Nails.....	3,067
Empty barrels & drums.....	3,023
Shooks.....	2,960
Electrodes.....	2,919
Animal food, n.o.s.....	2,915
Alfalfa meal.....	2,682
Jute bags & bagging.....	2,679
Macaroni.....	2,595
Washing machines.....	2,473

	tons
Cyanide.....	2,333
Leather manufactures.....	2,297
Sewing machines.....	2,290
Tomato pulp.....	2,290
Wheat in bags.....	2,262
Shorts.....	2,181
Maple strips.....	2,045
Eggs in shell.....	1,937
Meats in tins.....	1,923
Trucks.....	1,899
Shawinigan Black.....	1,817
Fruit pectin.....	1,793
Settlers' effects.....	1,762
Brass scrap.....	1,749
Oat feed.....	1,629
Oatmeal.....	1,579
Furniture.....	1,539
Raw vegetables.....	1,502
Match splints.....	1,497
Magnesite.....	1,468
Wool.....	1,403
Bedding.....	1,401
Bolts & nuts.....	1,355
Copper wire.....	1,325
Barbed wire.....	1,268
Fish in tins.....	1,238
Copper scrap.....	1,197
Fresh or frozen fish.....	1,179
Woodenware.....	1,113
Hardware.....	1,082
Ferro silicon.....	1,073
Carbide.....	1,054
Powdered milk.....	1,045
Tools.....	1,038

## PRINCIPAL DOMESTIC COMMODITIES

	tons
Bituminous coal.....	1,679,011
Gasoline.....	595,729
Fuel oil.....	405,502
Crude oil.....	203,635
Grain for local delivery.....	176,194
Cement.....	66,611
Refined sugar.....	65,408
Lumber.....	62,846
Sand.....	44,411
Lubricating oil.....	38,464
Flour.....	28,141
Iron & steel.....	26,967
Hay.....	25,819
Molasses.....	25,139
Coal oil.....	22,373
Gypsum.....	18,992
Creosote oil.....	16,852
Crushed stone.....	14,547
Potatoes.....	12,002
Anthracite coal.....	9,787
Paving blocks.....	7,991
Woodpulp.....	7,506
Canned goods.....	4,541
Scrap steel.....	3,269
Fish in tins.....	3,265
Iron ore.....	2,813
Rolled oats.....	2,554
Nails & tacks.....	2,498
Oilcake meal.....	2,460
Salt.....	2,424
Flax seed.....	2,413
Zinc ingots.....	2,277
Vegetables, in tins.....	2,132
Cheese.....	1,929
Raw fruit.....	1,691

	tons
Spoolwood .....	1,689
Bran.....	1,654
Wire rods.....	1,559
Shorts.....	1,538
Magnesium carbonate.....	1,502
Galvanized sheets.....	1,468
Scrap iron.....	1,380
Cured meats.....	1,365
Empty bottles.....	1,222
Zinc oxide.....	1,194
Middlings.....	1,161
Fresh meats.....	1,086
Firewood.....	1,082
Sulphate of ammonia.....	1,043
Coke.....	1,036



**TONNAGE SUMMARY**

	Rail	Vessel	Other	Total
Domestic.....	204,148	3,361,144	23,829	3,589,121
Miscellaneous..	135,145	39,664	704	175,513
Domestic total.	339,293	3,400,808	24,533	3,764,634
Less Lumber exported.....				49,407
Less Hay exported.....				25,727
				3,689,500

**Distribution After Import**

	Rail	Vessel	Other	Total
Import.....	260,176	1,287,552	4,023,219	5,570,947

**Carried Before Export**

	Rail	Vessel	Other	Total
Export.....	706,909	1,364,650	247,286	2,318,845
Lumber exported.....				49,407
Hay exported.....				25,727
				2,393,979

**Distribution of Tonnage**

	Rail	Vessel	Other
Domestic.....	339,293	3,400,808	24,533
Import.....	260,176	1,287,552	4,023,219
Export.....	706,909	1,364,650	247,286
	1,306,378	6,053,010	4,295,038

**Total Tonnage All Sources**

	tons
Import.....	5,570,947
Export.....	2,393,979
Domestic.....	3,689,500
Grand total.....	11,654,426

# **STATEMENT OF COAL AND COKE IMPORTS** **Foreign Coal and Coke Imported by Vessel**

	tons
British anthracite.....	1,228,954
German anthracite.....	142,272
Belgian anthracite.....	93,793
Indo-China anthracite.....	61,107
British bituminous.....	255,162
United States bituminous.....	5,157
German coke.....	7,278
Polish coke.....	4,277
Total Foreign by Vessel.....	<u>1,798,000</u>
	tons
Anthracite.....	1,526,126
Bituminous.....	260,319
Coke.....	<u>11,555</u>
	<u>1,798,000</u>

## **Other Coal and Coke Receipts**

	Tons
Canadian bituminous (by vessel from Nova Scotia).....	1,677,873
Canadian bituminous (by rail in winter).....	242
British anthracite (by rail in winter).....	1,367
United States anthracite (rail).....	8,076
United States bituminous (rail).....	877
Canadian coke.....	<u>1,069</u>
Total.....	<u>1,689,504</u>
	tons
Foreign, by vessel.....	1,798,000
Canadian.....	1,679,184
Foreign, by rail.....	<u>10,320</u>
Grand total.....	<u>3,487,504</u>
	tons
Bituminous.....	1,939,311
Anthracite.....	1,535,569
Coke.....	<u>12,624</u>
	<u>3,487,504</u>

## ENGINEERING DEPARTMENT

Capital expenditures, restricted during the past few years to the strictest immediate necessities, were on a more extensive scale during the season of 1935.

During this period, the Engineering Department supervised several items of construction already put in hand during 1934 under authority of the Public Works Construction Act of that year, prepared the plans, specifications and estimates for new work under authority of "The Supplementary Public Works Construction Act, 1935", and undertook its construction.

The following are the items of work under the 1934 P.W.C.A. continued or completed during the season of 1935:

Item 104—Repaving of certain surfaces—Completed.

Item 105—Reconstruction of raceways at Windmill Point  
Continued.

Item 106—Certain protection works at Elevator No. 3—  
Completed.

Item 107 Railway Track Embankment, sections 101 to 110,  
Montreal East—Completed.

Item 108—Raising of Wharf, Sections 38, 39 and 40—  
Continued.

Item 109—Painting of the Structural Work of Jacques-  
Cartier Bridge—Completed.

The following are the items of work undertaken under the "Supplementary Public Works Construction Act, 1935":—

1.—The Reconstruction of the Downstream Side of Laurier Pier—Section 43.

2.—The Reconstruction of the Sutherland Pier, Section 46.

Only half of the estimated cost of the latter reconstruction is to be defrayed by monies voted for the Supplementary Public Works Construction Act, however. The balance is to be paid out of the Harbour capital funds.

3.—The Reconditioning for deeper berths of the Alexandra Pier, Section 14.

The cost of this undertaking is also to be shared by the supplementary Public Works Construction Act, 1935 and the Harbour.

Tenders were called for and received on this item, but it was decided to postpone the operations until further notice.

4.—Dredging within the Limits of the Harbour.

This supplementary Public Works Construction Act, 1935 item is under the supervision of the Department of Marine Engineers and the Harbour Engineer has no control over it.

The following are the items of new work directly chargeable to the Harbour capital funds:—

- 1.—Part of Reconstruction of the Sutherland Pier, Section 46.
- 2.—Alteration and extension to the No. 3 Elevator Marine Jetty, Sections 43 & 44.
- 3.—Raising of tracks at sections 35, 36, 37, 38, 39 and 40.
- 4.—Filling depression rear of wharves, sections 35-40.
- 5.—Reconstruction of shore wharf, sections 40, 41 and 42.

Plans, specifications and estimates were prepared for this item, tenders called for and received, and contract awarded. Actual work has not as yet been started however for port operation considerations.

6.—Alexandra Pier reconditioning, section 14.

Plans, specifications and estimates were prepared for this item, tenders called for and received.

It was decided however to postpone constructional activities on this item, the cost of which is to be shared partly by the Harbour and partly by the supplementary Public Works Construction Act, 1935.

7. Reconstruction of the North Wall of the Windmill Point Wharf, sections 5W, 6W, 7W and part of 8W.
- 8.—Bickerdike Pier Filling.
- 9.—High Level Shore Wharves, sections 25-35-filling.
- 10.—Deepening Shore Channel, sec. 61-76 and 96-101.
- 11.—Completion of deepening inner Harbour to conform with the 30 ft. Channel.

## PUBLIC WORKS CONSTRUCTION ACT, 1934

### **Item 104—Repaving of certain surfaces.**

The following lanes of traffic were completely repaved during the season:

1. The Alexandra Pier and its approaches.
2. The King-Edward Pier and its approaches.
3. The Jacques-Cartier Pier and its approaches.

Approximately 1,040,000 granite blocks were laid for the reconstruction of the above roadways.

### **Item 105. Reconstruction of Raceways at Windmill Point.**

The contract awarded to The Atlas Construction Co. Ltd., for the demolition and part of the reconstruction of Raceways 1-6 and 8-9, Windmill Point Wharf, sections 5W, 6W, 7W and part of 8W, was so far advanced this year that it is expected that work will be completed early in 1936.

### **Item 106.—Certain Protection work at Elevator No. 3.**

The reinforcing of the Bulkhead Wharf at Elevator No. 3 consisting of certain protection works, previously described and which were started in 1934 by Angus Robertson, Limited, were completed during the present season of navigation.

### **Item 107. —Railway Track Embankment. Sec. 101-110, Montreal East.**

To insure a maximum development of the industrial wharves constructed at Montreal East below section 101, it was proposed to extend the Commissioners' Railway as far as the Marien Street Wharf, section 106. For this purpose, a contract was awarded to H. J. O'Connell, Limited in 1934, which was completed this year.

Some 77,000 cubic yards were used for the construction of this embankment.

### **Item 108.— Raising of a Fronting Wharf, sections 38, 39 and 40.**

The raising of the shore wharf from the upstream end of the wharf now under lease to the Dominion Coal Company

in a northerly direction along Sections 36, 37 and part of 38, in all a distance of approximately 1185 lineal feet, by a height of approximately 13 feet at the cope, was carried out by E. G. M. Cape & Company.

This work included the removal and putting back of the necessary bollards, the installation of safety ladders, anchor rods with their fittings and reinforced concrete anchor blocks, as well as the mass concrete cope wall itself.

The contract which was awarded to H. J. O'Connell, Limited for the supply of backfilling material to reclaim the area behind the raised portion of the wharf along sections 38, 39 and 40 built in 1934, was completed early in 1935.

Some 80,000 cubic yards of material were used for the purpose.

In order to reclaim that portion behind the raised portion of the shore wharf along sections 36, 37 and part of 38, it was found necessary to contract for an additional 70,000 cubic yards of filling material which was also delivered during 1935.

#### **Item 109.—Painting of Structural Work of Jacques-Cartier Bridge.**

The painting, by the Commissioners' own forces, of the steel and iron supports forming part of the railings and guards on the structure of Jacques-Cartier Bridge on both sides of the driveway and of the foot-paths, as well as the St. Helen's Island ramp, and all lamp and trolley poles, was completed during the early part of the season.

### **SUPPLEMENTARY PUBLIC WORKS CONSTRUCTION ACT, 1935**

#### **1.—Reconstruction of Downstream side of Laurier Pier, Section 43.—**

In 1932, the reconstruction of the upstream side and part of the outer end of the Laurier Pier, was completed.

This year, the reconstruction of the remaining portion of the outer end of the downstream side of this pier, was started.



A contract was given by the Government to the Atlas Construction Co., Ltd. for this reconstruction, and by the end of the year six cribs had been sunk and filled.

The cope length of this new wharf along the outer end is approximately 147 lin. ft. and 556 lin. ft. along the downstream side. A minimum 35 ft. berth depth, when the water level is at Elev. 91.35 at the pier, has been provided.

## **2.—Reconstruction of Sutherland Pier, Sec. 45, 46, 47.**

A contract was placed with E. G. M. Cape & Company for the reconstruction of the Sutherland Pier. The original pier is a low level timber one founded at 24 ft. below the water when the surface of the latter is at Elev. 94.58 at the Canal. The condition of the structure is moreover unsatisfactory due to its age.

The new pier will provide berths of 35 ft. depth when the water elevation is 91.35 H.D. at the pier.

The cope of the wharf on the upstream side will be maintained practically at the same location as the existing one, but the length of the wharf will be extended to 1000 ft., its width will be 226'6", the downstream side, parallel to the upstream one, will be 348'9" long, and a fronting or shore wharf, 458'6" long laid in a downstream direction at an angle of about 45° with the adjoining Sutherland Pier cope.

The reconstruction involves:

1. The demolishing of the upstream side of the old wharf and the provision of nine (9) reinforced concrete cribs with a cope wall up to Elev. 104.00 H.D.

2. The provision of two reinforced concrete cribs and cope wall at the return end of the pier.

3. The cutting of the downstream outer corner of the old wharf and the provision of three reinforced concrete cribs and cope wall to form the downstream side of the new pier.

4. The provision of four reinforced concrete cribs and cope wall to form the first length of a shore wharf which

eventually will be extended for a total length of approximately 5000 lin. ft.

5. The filling and backfilling in and behind the cribs and walls, and the provision of the necessary fittings, bollards, mooring rings, ladders and surface drains.

6. The reconstruction necessitates also the adjustment and extension of private water intake, oil and sewer pipes. These items do not form part of the contract, however, and are to be effected at the expense of the different owners, the City of Montreal, the St. Lawrence Sugar Refineries and the Dominion Spool Cotton Company.

At the end of the season the four (4) cribs forming the shore wharf and one crib of the downstream side of the pier were sunk in place and filled.

#### **4.—Dredging within the limits of the Harbour.**

The Department of Marine also carried out extensive test borings during the season for the purpose of ascertaining the quantity and nature of dredging work the Government proposes to carry out within the limits of the Harbour.

Dredging operations put in hand by the Department during the season of 1935, are:—

1. Deepening of the upper Harbour and the Channel through the St. Mary's current as far as Tarte Pier.

2. Removal, down to Channel depth, of a portion of the upstream corner of the Forsyth shoal to permit access to the reconstructed Sutherland Pier.

3. Widening of Channel opposite sections 94-95 and provision of an anchorage area for Ocean vessels.

## FLOATING CRANE

The record of work done by the Floating Crane is as follows:—

Number of working days.....	198
Number of days working.....	84

### Total Number of lifts :

Commercial.....	301
Commissioners' service.....	60
	361

### Average weight of lifts :

Commercial.....	8 tons
Commissioners' service.....	15 "

### Greatest lift :

Commercial.....	45 "
Commissioners' service.....	75 "

### Greatest tonnage from single ship :

S.S. "Heroy".....	146 "
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### Total weight lifted :

Commercial.....	2,620 "
Commissioners' service.....	910 "
	3,530 "
Total weight lifted, 1934 season.....	3,268 "
Total number of lifts made, 1934 season.	378 lifts

## LOCOMOTIVE CRANES

The amount of coal handled by our cranes from ships was greater by some 98,000 tons than last year. The distribution of working time is as follows :

	1935	1934	1933	1932
On coal.....	79.6%	69.8%	81.1%	82%
On Harbour work.....	12.9%	21.0%	5.3%	7%
On miscellaneous work:..	7.5%	9.2%	5.6%	11%

## Steam Locomotives :

Three new switching locomotives Nos. 301, 302 and 303, of a traction effort of 33,600 lbs. were bought from the Montreal Locomotive Works. They were delivered on Harbour tracks and taken possession of by the Commissioners on the following dates:

No. 301 — December 19th, 1935.

No. 302 — December 29th, 1935.

No. 303 — December 31st, 1935.

## EMPLOYMENT IN THE HARBOUR OF MONTREAL

The following table shows the maximum and average number of workmen employed by the Harbour Commissioners during the season of 1935, in the various operations of the Port, exclusive of men employed by the different Contractors on Harbour construction work:—

	Average	Maximum
Grain Elevator System—Operation.....	287	303
Master Mechanic's Gang.....	31	42
Harbour Yard Machine Shop.....	93	110
Guard Pier Repair Shop.....	39	49
Shipyards.....	58	65
Cold Storage Warehouse and Power House.	47	51
Electrical Branch.....	82	87
Roads and Water Branch.....	50	51
Roadmaster's Branch.....	113	189
Plumbers.....	4	4
Wharf Repairs.....	19	23
Shore Equipment (Loco. Crane Operation).	30	35
Sheds.....	35	113
Dredging Fleet: Crews of tugs, derricks, etc.	92	102
Surveys.....	4	5
Soundings.....	10	15
Traffic Dept.....	85	94
Police Dept.....	46	47
Jacques Cartier Bridge—Toll Collectors....	19	19
Fleet Watchmen.....	13	15
Public Works Construction Act .....	186	271

### WATER LEVELS

The depth of water for navigation in the Montreal Harbour Ship Channel and on the Sill of Lower Lock, Lachine Canal, is given below:

	Depth on Old Lock Sill, Lachine Canal		Depth in Harbour Channel	
	Average 1926-35	Average 1935	Average 1934	Average 1935
May.....	18'9"	15'7"	33'11"	32'0"
June.....	16'9"	14'2"	30'11"	30'7"
July.....	15'9"	14'5"	29'4"	30'10"
August.....	14'9"	13'5"	28'7"	29'10"
September.....	14'1"	12'8"	28'3"	29'1"
October.....	14'1"	12'5"	28'3"	28'10"
November.....	14'8"	12'6"	28'2"	28'11"

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